

MILKWEED VINE, A GROWING PEST OF CITRUS

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The milkweed or strangler vine, *Morrenia odorata* Lindl., is a rapidly spreading pest of Florida citrus groves (5,6). It shades out sunlight, competes for water and nutrients, and girdles tree limbs, as well as interferes with spraying, harvesting, and irrigation (3,5,6) (fig. 2A,B). It is a member of the milkweed family (Asclepiadaceae) and is native to subtropical South America (6). The vine, known as early as 1939 in Florida, presently ranges from Marion to Highlands counties and is widespread throughout the citrus groves of Lake, Orange, and Seminole counties (6). Also, it has been estimated that approximately 250,000 acres of citrus are currently infested (D. P. H. Tucker, personal communication).

The milkweed vine is characterized primarily by its heart-shaped to arrowhead-shaped leaves and the presence of a milky white sap in all of its plant parts. New vines develop under the canopy of citrus trees in early spring and summer either from germinating seed or from sprouting root pieces left in the soil following discing or hoeing (fig. 1A). The young vines intertwine to reach the lower branches and then rapidly grow into the tree top where they eventually envelop the entire tree (fig. 2A). The established vines are perennial and may produce seed pods within 1 to 3 years. The green to brown seed pods, formed in late summer and fall, develop to the size of avocados (fig. 1B). Each seed pod contains approximately 1,000 seeds which are equipped individually with a tuft of hairs suitable for ease of dispersal by wind.



Fig. 1. The milkweed vine: A) young developing plant with heart-shaped leaves; B) mature seed pod containing black seeds with tufts of white hair.

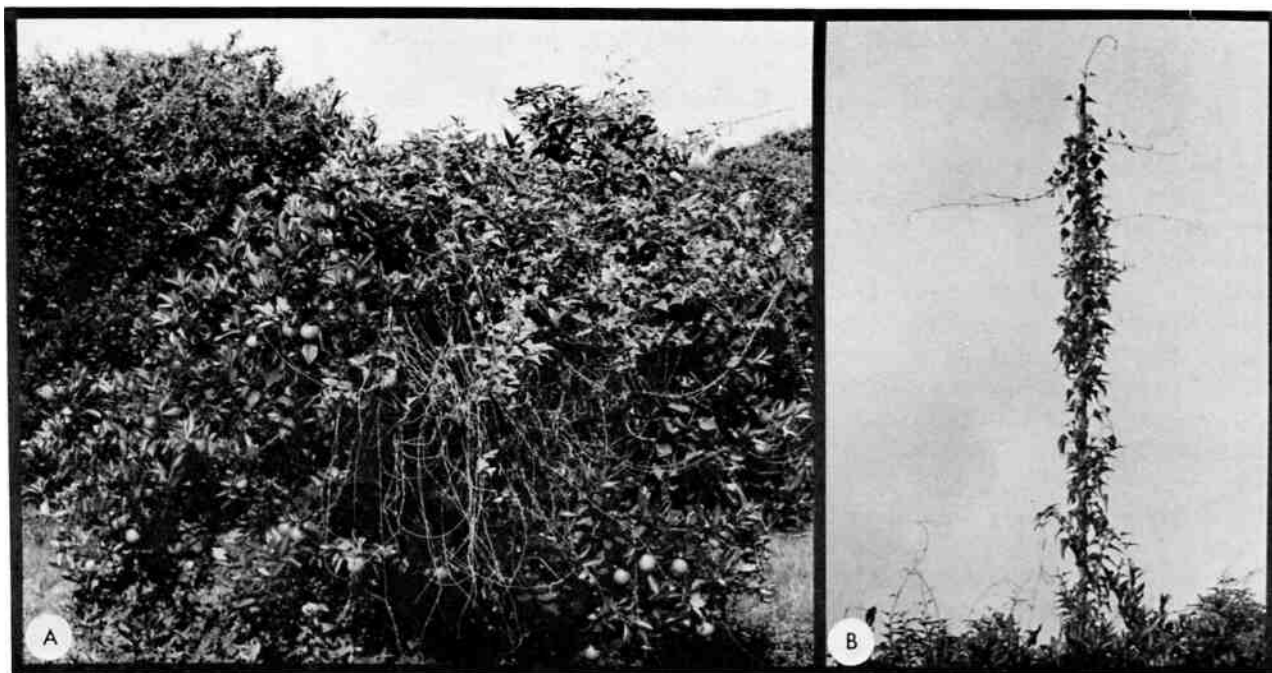


Fig. 2. The milkweed vine problem in citrus grove: A) infested tree; B) vine established on irrigation pipe and sprinkler head.

CONTROL. Mechanical removal of established vines and the use of selected herbicides during the growing season to prevent germination and to kill seedlings are currently the primary means of control (3,4,6). However, such methods are costly to the growers and only partial control of the vines may result. More recently, a new approach appears very promising using a fungus as a biological control agent (1,2). As with any biological control agent, all aspects must be investigated before widespread utilization can be realized.

Literature Cited

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